



Switzerland – The place for education, research and innovation

Switzerland is one of the most competitive countries in the world. Its success is the result of generous investments aimed at creating an efficient system of education and research. Equally important are values and principles such as ensuring the autonomy of higher education institutions and researchers, fostering competition and quality when allocating public funds, and encouraging an open outlook. These values are shared by the agencies and institutions involved in education, research and innovation. Switzerland is an associated member of the EU's Framework Programmes for Research and Technological Development as well as its Education Programmes.

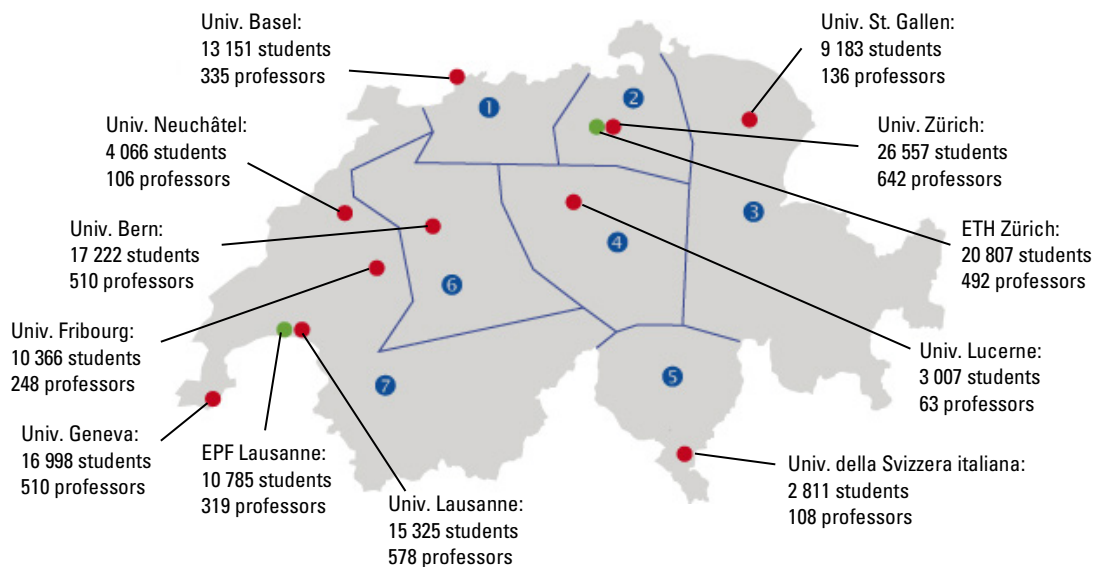
General Information

- Surface area: 41 290 km²
- Population: 8 513 200 (2018)
- Official languages: German, French, Italian and Romansh
- GDP: USD 579 billion (2018)
- GDP per capita: USD 67 691 (2018)
- GDP annual growth rate: 2.5% (2018)

Source: [OECD](#)

Education

- Switzerland's public spending on education corresponds to 4.6% of its GDP (2016).
- After finishing their compulsory education, around one third of young people opt for a general education school and two thirds follow the path of vocational education and training.
- Switzerland has 12 tier-one (T1) universities and 7 universities of applied sciences (UAS).
- Around 50% of T1 university professors and 25% of UAS teachers are from abroad.
- Around 30% of students of T1 universities and 19% of students of UAS are from abroad.



- ① University of Applied Sciences and Arts Northwestern Switzerland: 13 636 students, 795 teachers
- ② Zürich University of Applied Sciences: 22 605 students, 1 155 teachers
- ③ University of Applied Sciences of Eastern Switzerland: 6 288 students, 453 teachers
- ④ Lucerne University of Applied Sciences and Arts: 7 213 students, 646 teachers
- ⑤ University of Applied Sciences and Arts of Southern Switzerland: 5 726 students, 375 teachers
- ⑥ Bern University of Applied Sciences: 7 242 students, 712 teachers
- ⑦ University of Applied Sciences Western Switzerland: 20 781 students, 1 838 teachers
- ⑧ Kalaidos University of Applied Sciences (private, located in several towns): 2 514 students, 46 teachers

Research and Development (R&D)

- R&D personnel makes up 81 751 full-time equivalents, including 46 088 researchers (2017).
- Switzerland spent CHF 22.6 billion on R&D in 2017, an increase of 2% since 2015.

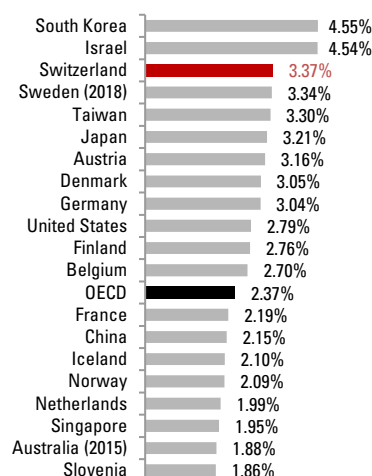
R&D financed by:	CHF m	%
Government	5 839	25.9%
Confederation	3 491	15.5%
Cantons	2 348	10.4%
Industry	15 117	67.0%
Other national sources	416	1.8%
Abroad	1 178	5.2%
Total	22 550	100%

R&D performed by:	CHF m	%
Industry	15 649	69.6%
Government	184	0.8%
Higher education	6 217	27.6%
Private non-profit sector	499	2.2%
Total	22 550	100%

Source: [Federal Statistical Office](#), reference year 2017

- Switzerland's total R&D expenditure corresponds to 3.4% of its GDP. This value is significantly above the OECD average.

R&D expenditure as a % of GDP, 2017

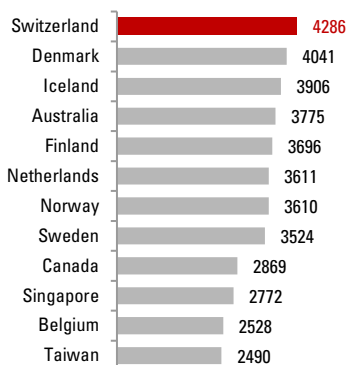


Source: OECD, [Main Science and Technology Indicators Database](#)

Publications

- With an impact (citation index) of 118 Switzerland occupies a prominent position (3rd slot, behind the US and the UK).
- Swiss researchers produce roughly 1.1% of all scientific papers published worldwide (19th slot). If we relate the number of scientific papers to the country's total population, Switzerland is at the top of the list.

Publications per million inhabitants, annual average 2011-2015

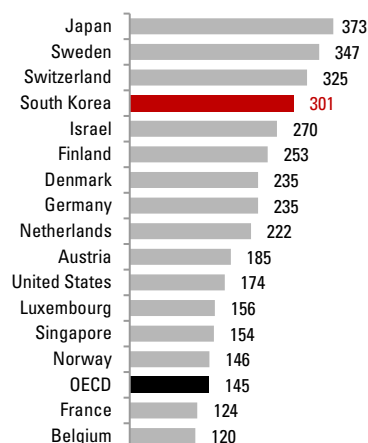


Source: State Secretariat for Education, Research and Innovation, [Switzerland's performance in scientific publications 2011-2015](#)

Innovation performance

- Switzerland ranks 1st in the *European Innovation Scoreboard 2019* and the *Global Innovation Index 2019*, and 4th in the *Global Competitiveness Report 2018*.
- Switzerland ranks 3rd with regard to the number of patents expressed relative to the total population.

PCT patent applications per million inhabitants, 2017



Source: OECD, [Main Science and Technology Indicators Database](#)

Position of Swiss Universities in International Rankings

	EPFL	ETHZ	Basel	Bern	Fribourg	Geneva	Lausanne	Lugano	Neuchâtel	St. Gallen	Zurich
Shanghai Ranking 2019	78	19	87	101-150	401-500	58	151-200	501-600	901-1000		61
QS Ranking 2020	18	6	151	123	581-590	110	153			398	76
Times Ranking 2020	38	13	94	113	301-350	144	198	301-350	501-600	401-500	90

Source: <http://www.universityrankings.ch/en/>